Enterprise Information Security

Contract #: 500-02-028 **Project #:** 1
Contractor: Electric Power Research Institute (EPRI)
Project Amount: $55,000
Contractor Project Manager: Thomas Kropp (650) 855-2751
Commission Contract Manager: Yvonne Nelson (916) 654-4255
Status: Completed

Project Description:
The strategic mission of this project is to enhance the security of our electrical infrastructure against a broad spectrum of evolving threats including cyber and communications attacks. This project collaborates regarding how the electricity infrastructure can be made more secure without compromising the productivity advantages inherent in today's complex, highly interconnected electric networks. This project enables collaborative industry and government information sharing and both short and long term technology development and deployment to address resolution of this dilemma. The electric power industry must quickly rethink its basic approach to system security, identifying the most important vulnerabilities and implementing programs to address the terrorist threat through improved prevention, mitigation, and recovery.
This project supports the PIER Program objective of Improving the reliability and quality of California's electricity by researching issues to assist the electric power industry to identify vulnerabilities and implement programs that will enhance the security of the system.

Proposed Outcomes:
1. Countermeasures development (technologies and methodologies) and testing: The contractor is developing intrusion detection software, high-speed encryption tools, and security-enhanced Inter-Control Center Communication Protocols (ICCP).
2. Risk mitigation/management, quantification and increased awareness: Through collaborative information sharing, the contractor is developing guidelines, best practices, lessons learned, standards, procedures, and contingency mitigation plans.
3. Reduction of vulnerabilities associated with reliance on the Internet: The contractor is investigating the feasibility of eliminating reliance on the internet for critical utility operations and the potential to move toward a new communications infrastructure for secure utility operations.

Actual Outcomes:
1. Inter-Control Center Communication Protocols TASE 2 Security Enhancements, technical report, EPRI Product ID # 1002596.
2. Supervisory Control and Data Acquisition Systems Security Guide, technical report, RPRI Product ID # 1002604.
3. Scoping Study on Security Processes and Impacts, informal technical update, EPRI Product ID # 1008988.
4. Workshop on Energy Information Security topics, EPRI Product ID# E215120.

Project Status:
The project has been completed. The Commission's participation in this project ended as of December 31, 2003.